IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	:	10/648,973	Confirmation No. 4144
Applicant	:	Larry L. Johnson	
Filed	:	08/27/2003	
Title	:	Rectifier-Super Capacitor Device for Use in a Power system for a Telecommunication Facility	
Group Art Unit	:	2836	
Examiner	:	Adi Amrany	
Docket No.	:	2232; SPRI.103532	
Customer No.	:	32423	

Mail Stop Amendment
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT

Sir:

In response to the Office Action mailed 03/24/2006, please amend the above-identified application as follows:

Amendments to the Specification: Begin on page 2 of this paper.

Amendments to the Claims: Begin on page 3 of this paper.

Amendments to the Drawings: None.

Remarks: Begin on page 7 of this paper.

AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0035] of the specification with the following ameded paragraph.

[0035] In another method of operation, PEMs 410 are the primary source of power. In this method, power is supplied temporarily by either a commercial electrical utility or microturbines 390 while the output of PEMs 410 rises to acceptable levels, which should be understood to be 48 volts DC and/or 200 amps DC. So long as the DC output from PEMs 410 remain below these acceptable levels, sensing/control mechanism 370 will cause switch 420 to be an open circuit. Likewise, sensing/control mechanism 370 will cause switch 420 to be a short circuit when the DC output from PEMs 410 exceed the acceptable levels. Therefore, ~~When~~when the output of PEMs 410 has risen to those acceptable levels, then power from either the commercial electrical utility or microturbines 390 is discontinued.

AMENDMENTS TO THE CLAIMS

Claims 6, 9, 11-13, and 16 are amended herein. Claims 1-5 are canceled. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-5. (Canceled)

6. (Currently Amended) A power supply system for providing reliable electrical power to a telecommunications facility, said facility containing telecommunications equipment, said system comprising:

an AC power source; and

at least one capacitor, each of said capacitors including a rectifier operable to convert said AC electrical power to DC electrical power adaptable to power said telecommunication equipment;

wherein each of said capacitors also includes at least three connection points to which other devices may be coupled, the first connection point coupled internally to said rectifier AC input, the second connection point coupled internally to said rectifier DC output and said first side of said capacitor, and the third connection point coupled internally to said second side of said capacitor;

wherein said AC power source is coupled to said first connection point, said second connection point is coupled to said telecommunication facility, and said third connection point is coupled to ground; and

~~The system of claim 5~~ wherein said AC power source is at least one microturbine generator operable to produce AC electrical power and adapted to be powered by a fuel.

7. (Original) The system of claim 6 wherein said fuel for said at least one microturbine generator is natural gas.

8. (Original) The system of claim 7 wherein said natural gas is supplied by a commercial utility.

9. (Currently Amended) The system of claim ~~5~~ 6 wherein said fuel for said at least one microturbine generator is propane.

10. (Original) The system of claim 9 wherein said propane is stored on site.

11. (Currently Amended) The system of claim ~~5~~ 6 wherein said AC power source is a commercial electric utility.

12. (Currently Amended) The system of claim ~~5~~ 6 further including a first switching mechanism that is operable either to couple at least one microturbine generator to said first connection point or to couple a commercial electric utility to said first connection point.

13. (Currently Amended) The system of claim ~~5~~ 6 further comprising at least one proton exchange membrane that is operable to produce DC electrical power adaptable to power said telecommunication equipment, said at least one proton exchange membrane adapted to be powered by a fuel, said proton exchange membrane coupled to said second connection point.

14. (Original) The system of claim 13 wherein said fuel for said at least one proton exchange membrane is hydrogen.

15. (Original) The system of claim 13 further including a second switching mechanism operable to switch from said DC power produced by said at least one rectifier/super capacitor device to DC power produced by said at least one proton exchange membrane.

16. (Currently Amended) A power supply system for providing reliable electrical power to a telecommunications facility, said facility containing telecommunications equipment, said system comprising:

at least one proton exchange membrane, said proton exchange membrane including a fuel input and an electrical output, said proton exchange membrane operable to convert fuel received at said fuel input to generate DC electrical power at said electrical output;

at least one ~~rectifier/super~~ capacitor ~~device~~, each of said ~~devices~~capacitors including a rectifier operable to convert said AC electrical power to DC electrical power adaptable to power said telecommunication equipment and said capacitor, said capacitor coupled to the output of said rectifier;

wherein each of said ~~rectifier/super~~ capacitors ~~devices~~ also ~~includes~~include at least three connection points to which other devices may be coupled, the first connection point coupled internally to said rectifier AC input, the second connection point coupled internally to said rectifier DC output and said first side of said capacitor, and the third connection point coupled internally to said second side of said capacitor; and

wherein said electrical output of said at least one proton exchange membrane is coupled to said second connection point, said second connection point also coupled to said telecommunication facility, and said third connection point is coupled to ground.

17. (Original) The system of claim 16 wherein said fuel for said at least one proton exchange membrane is hydrogen.

18. (Original) The system of claim 17 wherein said hydrogen is stored on site.

19. (Original) The system of claim 16 further including an AC power source coupled to said first connection point and a switching mechanism operable to switch from said DC power produced by said at least one rectifier/super capacitor device to DC power produced by said at least one proton exchange membrane.

20. (Original) The system of claim 19 further including control means for monitoring AC power produced by said AC source and DC power produced by said at least one proton exchange membrane and for causing said switching mechanism to be an open circuit so long as said DC output from said at least one proton exchange membrane remains below a predetermined value and to be a short circuit when said DC output from said at least one proton exchange membrane exceeds said predetermined value.

REMARKS

Applicant respectfully requests reconsideration of the present application. No new matter has been added. Claims 1-20 have been rejected in the Office Action. Claims 6, 9, 11-13, and 16 have been amended. No new claims have been added. Claims 1-5 have been canceled. Accordingly, claims 6-20 are pending herein. Claims 6-20 are believed to be in condition for allowance and such favorable action is respectfully requested.

Informalities

Claims 5 and 16 have been objected to for disclosing a "rectifier/super capacitor device." Claims 6-15 have been objected to because they depend from claim 5. Claims 17-20 have been objected to because they depend from claim 16.

Claim 5 has been canceled and therefore the objection is considered moot.

Claims 6-15 have been amended to refer to claim 6.

Claim 16 has been amended to delete "rectifier/super capacitor device" and replace it with "capacitor." Applicant submits that the amendment overcomes the objection.

In light of the amendment to claim 16, the objections to claims 17-20 are considered moot.

Judicially Created Double Patenting Rejection

Claims 1-3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,960, 838. Claims 4-20 are rejected over claims 1-5, 8-10, and 12-13 of U.S. Patent No. 6,960, 838 in view of U.S. Patent No. 6,666,123. In order to avoid further expense and time delay, Applicant elects to expedite the prosecution of the present application by filing a terminal disclaimer to obviate the double patenting rejection in compliance with 37 C.F.R. §1.321 (b) and (c). Applicant's filing of

the terminal disclaimer should not be construed as acquiescence of the Examiner's obviousness-type double patenting rejection. Attached is the terminal disclaimer and accompanying fee (37 C.F.R. § 1.20(d)).

Rejections based on 35 U.S.C. § 112

Claim 20 is rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The Office suggests that the claim contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Office suggests that the claim contains a limitation that the system includes "the control means for causing the switching mechanism to be a short circuit when said DC output from said at least one proton exchange membrane exceeds said predetermined value has no basis in the specification." *See* Office Action, page 2-3.

The claims as filed in the original specification are part of the disclosure for purposes of the written description requirement of § 112, first paragraph. Therefore, if an application as originally filed contains a claim disclosing material not disclosed in the remainder of the specification, the Applicant may amend the specification to include the claimed subject matter. *See, e.g.,In re Bennno,* 768, F.2d 1340, 226, USPQ 683 (Fed. Cir. 1985). Thus, Applicant has amended the specification to include language found in the originally filed claim 20. *See* Amendments to the Specification, page 2 of this response. Applicant submits that these amendments overcome the § 112, first paragraph rejections made.

Rejections based on 35 U.S.C. § 102 and 35 U.S.C. § 103

Claims 1-2 have been rejected under 35 U.S.C. § 102 (b) as being anticipated by U.S. Patent No. 5,959,851 ("Shutts"). Claims 3-5, and 11 stand rejected under 35 U.S.C. §

103(a) as being unpatentable over U.S. Patent No. 5,959,851 ("Shutts"). It is believed that all of these rejections are now moot in view of the amendments now made.

Based on the rejections made in the last Office Action, it appears that all the independent claims contain combined arrangements not found in the prior art of record – either singly or in combination. Thus, we ask that the Examiner's art-based claims be withdrawn with respect to claims 6-20.

CONCLUSION

For the reasons stated above, it is believed that claims 6-20 are now in condition for allowance. If any issues remain that would prevent issuance of this application, the Examiner is urged to contact the undersigned by telephone prior to issuing a subsequent action. It is believed that no fee is due in conjunction with the present amendment. However, if this belief is in error, the Commissioner is hereby authorized to charge any amount required to Deposit Account No. 19-2112.

Respectfully submitted,

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5-24-06
Date

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